

# **Master List of Comments Received on Implementation Plans and Countywide Coordinated Implementation Strategy (Strategy)**

October 6, 2011

This document provides responses to the comments Montgomery County Department of the Environment (DEP) received during the public comment period on the draft watershed implementation plans and Countywide Coordinated Implementation Strategy (Strategy) document. Comments have been compiled and sorted by major topic areas and common themes. The individual or party responsible for a set of comments has been assigned a unique reference number. Each comment under a topic area is attributed with the appropriate reference number(s) using the following notation: [1]. After each comment, a brief response is provided (in italic font). A complete version of the submitted comments is also provided in Attachment A.

Comments Reference Number (See Attachment A for comment in its entirety as submitted to DEP) are as follows:

- 1) Mr. Charlie Andrews
- 2) Mr. Lee Epstein
- 3) Anacostia Watershed Citizens Advisory Committee (AWCAC)
- 4) Little Falls Watershed Alliance
- 5) Muddy Branch Alliance
- 6) Ms. Anne Ambler
- 7) Alice Ferguson Foundation
- 8) Maryland National Capital Building Industry Association
- 9) Maryland National Capital Park and Planning Commission
- 10) Earthjustice
- 11) Friends of Rock Creek's Environment (FORCE)
- 12) Stormwater Partners
- 13) Ms. Dana Minerva
- 14) Montgomery Civic Federation (MCF)
- 15) Ms. Cindy Snow

## **MAJOR TOPIC AREAS AND COMMON THEMES**

### **1.0 Education and Outreach**

#### **a. Comment**

Practice 2 (Lawn Stewardship Education and Outreach Campaign) should add the MNCPPC to the list of Existing Partnerships to Nurture. Mowing practices by MNCPPC should be a model for homeowners. No mow zones in the parks should be greatly expanded and educational signage used to explain the water quality benefits of this practice. [3]

Response

*DEP will add MNCPPC in the Existing Partnerships to Nurture category. MNCPPC has its own MS4 requirements and DEP has no regulatory authority on MNCPPC programs or practices, however, DEP is willing to consider encouraging MNCPPC to adopt these practices and expand educational opportunities to explain the water quality benefits of no mow zones.*

b. Comment

Practice 3 (Anti-Littering Education and Outreach Campaign) lists as a measure of litter reduction “reduction in citations after initial baseline year where enforcement is stepped up.” This is implausible. Watershed group experience from holding clean-ups is that a significant expansion of enforcement for several years will be required to bring about the behavioral change to reduce littering in the County. We also recommend the Department of Transportation be listed as an Existing Partnership to Nurture. The DOT Adopt A Road program is very helpful in reducing trash in the County; a complementary program would be useful for willing citizen volunteers who aren’t able to commit to six clean ups in a year on one site required by Adopt A Road. Known trash hotspots on DOT property such as roadway medians and swales should be listed in addition to public recreation areas as places to measure the effectiveness of the Anti-Littering Education and Outreach Campaign. [3]

Response

*DEP will add DOT as an Existing partnership to Nurture. Staff currently sit on the Keep Montgomery County Beautiful Committee and are very familiar with the Adopt-a-Road program. DEP is currently working with this group to consider other complementary programs such as an Adopt-a-Spot Program. Public recreation areas are not the only hotspot areas listed. Implementation points include roadways as well as commercial and industrial areas. DEP will expand the “Measuring Program Success” section to include “Tracking and reporting of visual assessments of park litter and roadway median and swale litter”.*

c. Comment

Practice 4 (Innovative Stormwater Management Awareness Campaign) notes that prioritization should be given to watersheds with Environmental Site Design (ESD) goals including the Anacostia, should build on existing restoration plans that exist for Sligo Creek and Rock Creek, and install signs and awareness activities at locations where foot traffic is expected to be highest. AWCAC asks that this reasoning be continued to its logical conclusion: the Wheaton Urban District should be explicitly identified in the strategy as the ideal location to highlight best management practices for stormwater management. As the only urban district in the County now in the beginning stages of redevelopment, and in the headwaters of both the Anacostia and Rock Creek, Wheaton offers unique opportunities to showcase the potential of redevelopment to bring water quality improvements. The County should enthusiastically seize this opportunity while it has the chance. [3]

The Implementation Plan contains a number of inserts regarding public education ideas. I suggest that signage and promotional literature regarding large project would be very effective. For example, currently a large stormwater project is under construction near Woodmont and Wisconsin and lots of folks walk by it every day on the way to and from NIH/Navy Medical/Metro. Most think the project is part of never ending construction at NIH. I think it would be effective if there was signage indicating the nature of the project, location within the Rock Creek watershed, and the intended benefits of the project. [1]

Response

*While the Anacostia and Rock Creek are identified priority watersheds, DEP will consider all projects that represent opportunities to utilize existing partners or momentum for achieving water quality improvement.*

*Project such as the NIH stormwater improvements will be an ideal educational opportunity and promotion for the benefits of water quality. Staff is currently working with NIH project members on appropriate signage and publicity and will consider focusing on these types of projects to achieve the biggest impact from outreach to the public.*

d. Comment

My experience has been that Asians and Latinos share the same concerns regarding the watershed as Caucasians and that all of us interact in many of the same places: church, school, grocery stores, etc. (page 8) [1]

Response

*Agreed, however, as part of the Strategy, we are looking to expand the variety of ways to connect with citizens and stakeholders. Experience has shown that providing multiple media types and bi-lingual messaging improves overall awareness and behavior change.*

e. Comment

The Strategy states that the outreach practice sheets are for the start-up phase only. We understand that it is necessary to be flexible and innovative, particularly with something as complex as outreach. However, there needs to be assurance that there is a process for updating the outreach practice sheets beyond the initial year. We recommend including evaluation and expansion as part of the measures for monitoring. [7]

Response

*Agreed, the Strategy acknowledges this and identifies the need for adaptive management, monitoring and reporting (Section 4.0, page 33). There is also the recognition that there may be additional staffing and organizational needs over time.*

## 2.0 Impervious Surface Target

a. Comment

Quantifying the twenty percent of additional impervious surfaces that will be restored in the 5-year permit cycle would seem to be a simple task, but as best as I can understand it is not done in the document. The report (Rock Creek Implementation Plan) in the beginning nicely describes watershed conditions and quantifies the current amount of impervious surfaces in the watershed and provides a map showing where these surfaces are located within the watershed. I was expecting to see a map with 20 percent of the existing impermeable areas highlighted indicating that these are the areas that will be restored in the 5-year permit cycle. No such map or depiction is included in the plan. [1]

Response

*The watershed restoration goal for runoff from impervious acres is a countywide goal. There is not a 20% goal for each watershed.*

## 3.0 Environmental Site Design (ESD) Costs

### a. Comment

Several comments reflected concern that the assumed ESD costs were too high and that they also did not account for other benefits such as aesthetics, heat island reduction, and quality of life. Further there was concern that the high assumed costs negatively impacted the ranking prioritization for implementation of ESD. [2], [12], [13], [14].

There was also a comment that expressed concern about the overemphasis on ESD due to the high cost of implementation. [8]

### Response

*ESD costs were developed based on current County experience with implementation of similar types of projects as well as literature based values. Specific practices (e.g., green roofs) can have quite variably ranges of cost depending on site conditions, permitting requirements, and other considerations. The cost/benefit of ESD did not result in a lower implementation rate of ESD practices throughout the Strategy. To the contrary, the full restoration potential that included all assumed ESD opportunities is assumed for the Strategy. As the County gains more experience with ESD implementation, it is hoped and anticipated that costs will lower. The County is committed to implementing ESD as part of the Countywide strategy.*

## 4.0 Ranking of Projects and Prioritization

### a. Comment

The watershed analysis uses costs and other factors to rank the hundreds of possible projects -- but the reader has absolutely no idea from the study what the formula for ranking is, i.e. how benefits and costs are weighted against pollution mediation performance or how the other factors mentioned (e.g. existing area imperviousness) also figure into the ultimate score. This is a crucial part of the analysis that should be presented for the public to review and upon which to comment. [2] [13]

### Response

*Section 4 (p. 24) of the Strategy describes the considerations that factored into how priorities were made. Ultimately there are a number of considerations that have to be balanced, whereby there is a blend of implementation strategies applied across the full County permit area. No explicit ranking formula was applied, but rather a suite of factors was considered.*

### b. Comment

We are concerned that under the draft plan, there will not be enough resources dedicated to conservation and restoration of Muddy Branch and other watersheds without a TMDL. While we understand the county has an imperative to meet the TMDL requirements, we would like to see the Implementation Strategy reflect the fact that it is cost effective to protect waters that are not impaired than to try to fix impaired waters. The Strategy should dedicate adequate resources to pollution prevention and reduction to make sure Muddy Branch does not end up with a TMDL in the future. Investments in Muddy Branch will help reduce the impairments to the Lower Potomac that are identified in the draft Strategy. [5]

Response

*The Strategy allocates substantial investments in all of the watershed groups that have implementation plans. However, the number of opportunities currently known and inventoried vary from watershed to watershed.*

c. Comment

The plan should clarify how restoration opportunities and priority neighborhoods were selected and prioritized. Information presented indicates that only one subwatershed is in “Excellent” condition and that roughly 18% of the streams are in “Good” condition. Most of the restoration opportunities identified are in the more degraded areas of the watershed. The report should explain if the implementation strategy is designed to push the “Good” areas to “Excellent” or the “Poor” to “Fair” on a subwatershed basis. We are concerned that the focus on numbers of acres and percentages may obscure achievement of the end goal, which is clean streams where children can safely splash and wade. [11]

Response

*The Strategy explains how restoration priorities were arrived at in Section 4.0 on page 24. The neighborhood priorities were identified using a modified approach that was used by the Army Corps in the Anacostia River Restoration Plan. A description of that analytical approach is found in the implementation plans (e.g., Section 3.3, page 23 of the Rock Creek Implementation Plan). Healthy streams are the ultimate goal of the Strategy and implementation plans. Adequately treated impervious cover is a permit based surrogate to help arrive at healthy streams.*

d. Comment

The Implementation Plan focuses on stormwater projects in urban developed areas rather than suburban/rural areas of the County....Why not focus on the watersheds with the highest pollutant concentration? [8]

Response

*The Strategy prioritizes the most impaired watersheds with EPA approved TMDLs, which are also the more urban areas. The MS4 permit also is exclusively written for areas within the storm sewer system, and excludes rural areas. Lastly, based on the WTM modeling results, the urban areas result in higher annual pollutant loads than the rural areas. This is a result of a combination of higher runoff volume rates and greater urban extent within the MS4 permit area.*

## 5.0 Trash

a. Comment

The Implementation Plan does not describe the current amount of trash in the watershed (Rock Creek). Under the plan subsection titled “Existing Trash Loads”, there is merely a discussion of strategies and practices to reduce trash. How can one meaningfully quantify strategies to reduce trash if there is not a current understanding of the amount of trash in the watershed? Analyses conducted for the Implementation Plan indicate that 55% of trash will be reduced as result of collection in management structures. Is it really the intent of Trash Free Potomac to collect all trash in stormwater structures? Programmatic trash reduction programs are mentioned but they are not part of the quantitative evaluations conducted in the report (page 31). Might not these approaches be more effective than merely collecting the trash in structures? [1]

Response

*The only Montgomery County watershed that has a quantified limit is the Anacostia--for all other watersheds, we must show progress in reduction but not towards a specific goal. Reduction will be shown based on increased level of effort from baseline conditions.*

*The implementation plans are not targeting structural practices as a "primary" trash reduction strategy; however, by the virtue of structural practices being a key component of other pollutant reduction goals, we do want to take credit for the trash reduction they can provide.*

b. Comment

These statements concerning BMPs in the MCCIS and draft implementation plans, along with the relatively small amount budgeted for countywide programmatic practices in the start-up period, suggest that structural stormwater BMPs will be the overwhelmingly favored strategy to meet trash reduction targets, especially outside of the Anacostia Watershed. We caution against overreliance on structural devices to achieve trash reduction goals for several reasons.

The failure to stress elimination of trash at its source will mean having to contend with even greater quantities of trash... Montgomery County should sufficiently and expeditiously fund programmatic practices such as education and better enforcement to yield a substantial reduction of trash at its source throughout the county..... The Montgomery County Police Department should begin to keep records of the number of citations its officers issue for littering, and to periodically report this information to the public, broken down by police district....The Montgomery County Police Department should strive to increase the number of tickets issued for littering countywide, and should publicize this campaign..... An owner or occupant of commercial or industrial property must not let solid waste accumulate on the property or be carried or deposited by the elements on any other public or private property. [4]

Response

*LFWA submitted a number of well thought through strategies to aggressively target trash reduction. No implementation plan places a priority on structural BMPs to be the primary trash strategy. Rather, by the very virtue of being present as a practice targeting treatment and removal of pollutants such as sediment and nutrients, these structural practices will act as trash traps for the drainage area draining to them. None of the structural BMPs are being recommended as trash reduction measures. It is of note, however, that the Alice Ferguson Foundation is in fact recommending the specific implementation of trash traps such has recently been used in Nash Run in the Anacostia Watershed.*

*We will look to enhance the narrative and detail associated with some of the nonstructural strategies for managing trash loads, as suggested. Appendix E of the Guidance Document describes some of these measures including policy, enforcement, and source control in greater detail and the Anacostia Watershed Implementation Plan quantifies the benefits of these nonstructural strategies. Establishing metrics such as numbers of citations issued is described already, but there is reasonable point about whether the metric should target an increase or decrease. Perhaps the metric should initially be an increase with future years being a decrease (based on the assumption that education and enforcement are in place and effective).*

c. Comment

Several comments addressed a range of additional trash issues that echo the concerns of the comments above. In addition there were requests for monitoring and measuring as well as stronger enforcement

and reporting for dumping. Comments also recommended practices such as improved storm drain grate designs, homeless program support, and street sweeping. [7], [11], [12], [14], [15].

Response

*The Strategy along with supporting documents includes a broad range of trash management strategies that include structural practices, programmatic practices (e.g., street sweeping), education, and enforcement. It is recognized that the trash management issues are significant and will require active and adaptive management of approaches to meet the targets of the Trash Free Potomac Treaty as well as relevant trash TMDLs.*

## 6.0 Monitoring

a. Comment

We recommend that the County gather and collectively publicize all water quality monitoring work done on the County's waters by both the County and outside agencies including the USGS, MDE, MDDNR, WSSC, and MNCPPC. This will help identify gaps in information and sources of pollution for the general public. [3]

Response

*Much of the County's current monitoring data is available in summarized format on the County website. Other data collected by non-County entities is typically available on those agency's websites. Right now, the County is not planning on managing and posting other agency data on its website, but the County is generally aware of the other data collection efforts that are ongoing in County watersheds and will continue to stay on top of these efforts as they occur.*

b. Comment

To this end, we would like the Implementation Strategy to include requirements for regular stream monitoring utilizing data collected by citizen groups like Muddy Branch Alliance. We would like the data to be made public and if degradations are found, the Implementation Strategy should include provisions for additional restoration efforts to meet the MS4 permit targets. [5]

Response

*The County currently carries out an extensive countywide stream monitoring program where results from these efforts are regularly posted on the County website. The County will explore ways to supplement the existing monitoring using volunteers that have undergone a suitable level of training for data collection activities.*

c. Comment

Several comments expressed the need to monitor the effectiveness of the various implementation strategies (both structural and nonstructural) to ensure that targets and goals are being met. [5]

Response

*The County acknowledges the need for monitoring as part of the Strategy and is committed to building upon the existing countywide stream monitoring program to develop complementary efforts to determine implementation effectiveness of the range of strategies being pursued. The Strategy identifies the need for adaptive management, monitoring and reporting (Section 4.0, page 33).*

## 7.0 TMDLs

### a. Comment

The only TMDL that has been developed for Rock Creek is for fecal bacteria. The report indicates that the baseline *Enterococci* (indicator used for fecal bacteria) load is 453,669 billion MPN/year as described in TDML document and notes on page 29 that about 59% is from pets (269,366 billion MPN/year) and 41% from wildlife (184,303 billion MPN/year). A calculation is described in the plan that was made using the “Watershed Treatment Model” that indicates that potential pet waste load is 53,600 billion MPN/year (table 21). There is no discussion of the discrepancy between 269,366 MPN/year from pets based on TDML document and the 53,600 billion MPN/year from pets based on calculation in report. This is an extremely large discrepancy and without reconciliation there is no credibility to any of the claimed reductions from the various restoration elements analyzed. In fact, the report indicates that County Property ESD Retrofits can reduce the *Enterococci* load by more than pet waste management, which seems very implausible. [1]

I am incredulous in reviewing Table 28 that 92% of baseline levels of total suspended sediment will be removed by 2020 and 100% will be removed by 2025. The methods used to achieve these fantastic reductions are not described in the report and I assume that some brilliant new technology has been developed to remove all sediment from the creek. I look forward to 2025 and a clear flowing water in Rock Creek following large storm events. Or did I misunderstand the metric? [1]

### Response

*This comment points out an inconsistency and point of confusion in the presentation of bacteria in the implementation plan. Specifically, Table 21 lists the total potential bacteria reduction from pet waste education in Fecal coliform as calculated by the WTM (this is the indicator species that is the default in the WTM). Table 23 lists the reduction in enterococci, where there has been a conversion (using MDE guidance) to the same bacteria species as is used in the TMDL. Therefore, the discrepancy noted is due to a conversion factor and will be addressed in the final version.*

*For the pollutant load reductions, we must make it clearer that our proposed programs and projects will achieve the wasteload allocations (WLAs) assigned to us by MDE. That is not the same as 100% of all reductions required to meet water quality standards. There are a variety of other sources that must meet reductions: City of Rockville, State and Federal properties, MNCPPC properties, and 'non-point source'. So, if we meet the WLAs assigned by MDE all of those other sources must also meet their required reductions in order for Rock Creek to 'run clear' again.*

*In Appendix A to the draft Implementation Plan, the listed projects are those that DEP intends to pursue for construction by the end of this permit cycle (2015). There are other projects and project areas that DEP intends to target for additional projects for construction by the end of this permit cycle. These include residential and commercial areas where we hope that voluntary implementation of runoff management will occur--that will require a significant expansion of our current RainScapes Program. As these projects are built and programs are enhanced, we will continue tracking stream resource responses particularly close to project target areas. This will assist us in evaluating the type and rate of changes in those downstream resources. There are no clear modeling tools available to predict exactly how those resources will respond as upstream stormwater management increases, although we are working with some researchers who are hoping to develop highly sophisticated models that will do just that.*

b. Comment

The document states on page 29 "*The restoration implementation strategy should be geared to target the source of bacteria.*" If the source of almost 60% of fecal bacteria is pets, it would seem that pets should be targeted. Rather, this document suggests that numerous restoration strategies are required. [1]

Response

*Pet waste management will be a priority in watersheds with bacteria TMDLs as detailed in the outreach and education call outs in the individual implementation plans. In addition, a specific practice sheet has been developed on pet waste management (see Countywide Strategy, Attachment E).*

c. Comment

If a significant portion of bacteria is from goose and deer waste, perhaps we could gain compliance by reducing these populations. [6]

The standard [enterococcus/e coli bacteria], while probably the best that USEPA can do, may not be very accurate in predicting human illnesses in situations where pets or wildlife are the primary source of the bacteria. Therefore, I recommend that you not target bacteria in your model runs, or base any actions specified in the plan on addressing bacteria unless they control human fecal material.

I believe that meaningful efforts to reduce human illness related to water contact would more meaningfully addressed by working to reduce sewage line leaks because these release human fecal bacteria. [13].

Response

*The County will be exploring a wide range of approaches to address bacteria loading from urban wildlife. Non-wildlife sources such as those from sewage overflows and septic failures are generally addressed by other permittees with required actions (e.g., WSSC).*

## 8.0 Land Use Planning, Development, and Redevelopment

a. Comment

Several comments identified concerns with how loads from new development and redevelopment were being accounted for in the Strategy. In addition, these comments also encouraged broader coordination and integration between land use planning and water quality. Finally, comments urged that environmental site design be combined with larger-scale land-use planning to ensure that sites are designed using low impact development techniques and in a way to limit the need to build new roads and other infrastructure in less developed areas of the county. [5], [9], [12], [14]

Response

*The analyses conducted to support the Strategy did not factor in increased loading from potential new development. First, the County is largely built out and the majority of development that will occur will be redevelopment. The relative proportion of new development load to existing load will be very small, in most watersheds. Second, new development and redevelopment are subject to the full extent of Maryland's ESD requirements, which target a "woods in good condition" standard. As a result, the loading for the most common TMDL pollutants (e.g., TSS, nutrients, and bacteria) should not be expected to increase.*

## **9.0 Interagency and Interjurisdictional Cooperation**

### a. Comment

Several comments encourage and recommended continued and increased levels of both interagency and interjurisdictional coordination and cooperation. In some cases additional detail was requested on what steps would be taken to ensure continued and improved efforts. [5], [6], [7], [9], [11], [12], [14].

### Response

*Montgomery County Department of Environmental Protection (DEP), as the County Department responsible for permit compliance, acknowledges the importance of working closely with other County departments and agencies along with other permittees that are located within shared watersheds (e.g., Gaithersburg, Rockville, Takoma Park, NIH). DEP already partners with many of these entities and will expand these efforts under this Strategy. Details of these coordination efforts are not fully developed but they will be particularly important with respect to trash management, cost sharing for structural controls, and broader regional outreach and education initiatives.*

## **10.0 Volume Reduction**

### a. Comment

At least two comments requested that more information be provided relating to volume reduction benefits being generated as part of the Strategy. [12], [13], [14].

### Response

*Volume reduction analysis was developed as part of the watershed treatment model (WTM) modeling and will be incorporated into the final Strategy document.*

## **11.0 Document Format and Readability**

### a. Comment

Numerous documents cited in Implementation Plan are not listed in references. Some examples are:

- Watershed Feasibility Study 2001
- Watershed Restoration Action Plan for Roc Creek 2001
- Guidance Document (for example, cited on page 17) [1]

### Response

*Complete references will be provided in the final version.*

### b. Comment

Maps are not clear and very difficult to read. [1]

### Response

*We understand the difficulty with the map size; however, they are provided at this scale to facilitate 8.5" x 11" printing.*

c. Comment

The framework of the overall strategy should be provided at the beginning of section 4 and linked to the various pieces of the document for better coherence. [9]

Response

*Additional narrative will be provided to clarify and improve.*

d. Comment

BMP coding and significance of dates associated with coding is confusing. [13]

Response

*Additional narrative will be provided to clarify and improve.*

e. Comment

Multiple comments were made about improving outreach and education profile sheets. [6]

Response

*Additional narrative and edits will be provided to clarify and improve.*

## 12.0 General and Miscellaneous Comments

a. Comment (Hotspot)

Locations of complaints were given “hotspot” identification in the pollution loading model. Note that overwhelming majority of complaints were related to stormwater pollutant discharge. Targeting elimination of the pollutant discharge to stormwater rather than addressing them with structural fixes would make much more sense. (pages 10 and 11) [1]

Response

*It is agreed that preventing pollution from occurring is preferable to and more cost effective than cleaning it up after it has occurred. The County has a number of programs designed to address prevention. The purpose of these tables was to illustrate how known locations of reported water quality related issues were treated differently in the Watershed Treatment Model by assigning a higher pollutant concentration associated with that site.*

b. Comment (non-permit activities)

Some comments relate to areas outside of MS4 Permit area and targeted activities beyond requirements of the permit. Examples include targeting agricultural lands for BMPs, fixing failing sanitary sewers, invasive species management, and developing offset programs for new and redevelopment. [4] [8] [9] [13].

Response

*Several constructive observations and recommendations have been noted, and while not directly applicable to the County’s MS4 Permit, can still be part of the ongoing dialogue between partners, stakeholders, and interested parties.*

c. Comment (non implementation plan watersheds)

Some comments were offered relating to activities, priorities and implementation in watersheds where implementation plans have not been developed. [4].

Response

*The County is actively working towards development of implementation plans for all watershed groups in the County. However, a few (e.g., Upper Potomac Direct, Lower Potomac Direct) currently do not have watershed assessments completed, which is a pre-requisite for developing implementation plans. These watersheds also do not have TMDLs. Once assessments for these watersheds are complete, an implementation plan can be developed and these watersheds can be better integrated into the Countywide strategy.*

d. Comment (structural practice effectiveness)

Questions were raised about the effectiveness of some of the structural strategies being proposed to reduce pollutant loads, especially stream restoration. [1], [12], [13], [14].

Response

*All structural practices being proposed and targeted under the Strategy (including ESD) are believed to be consistent with the performance standards set forth in the Maryland Stormwater Management Manual and assumed to at a minimum treat the full water quality volume along with providing channel protection storage either in form of detention storage or volume reduction capabilities.*

*Stream restoration performance with respect to sediment and nutrient load reductions is based on recent research and the continually evolving science. Specifically, in the last five years, a greater emphasis in the Maryland stream restoration community has been placed on floodplain reconnection to promote greater flow attenuation, sediment deposition, and nutrient assimilation. The link between the recent research and the approach pursued to account for potential load reductions associated with stream restoration is described in implementation plans where sediment is an identified TMDL (i.e., Anacostia and Lower Monocacy). Stream restoration is not currently counted towards impervious cover treatment in the Strategy.*

*We propose to leave the estimated reductions from the range of practices proposed as is until MDE finalizes guidance with respect to acceptable pollutant load reductions and impervious cover treatment equivalency. If future guidance differs from our approach and adjustments are required, we will make these adjustments in association with future annual reports submitted to MDE.*

e. Comment (partnerships)

At least two comments identified an interest in local groups partnering with the County to provide support activities associated with the Strategy like vegetation management, public outreach, water quality and stream health monitoring, and trash clean up. [4], [5], [11].

Response

*Technical Assistance, possible grant funding and/or contract mechanisms are all items currently being explored by DEP. The watershed organization members will be an integral part of achieving success in meeting the MS4Permit requirements. While not specifically noted, the watershed organizations will be utilized as a key component in accomplishing the suggested delivery techniques through "existing partnerships to nurture". Watershed organizations are listed on every practice sheet and their*

*assistance will be essential to meeting the objectives laid out in the strategy. Since cost was a factor in the plan development, the primary mechanism for outreach will be viral dissemination of developed education materials to reach the greatest number of residents. DEP will continue to involve local volunteer groups in its watershed management and watershed outreach efforts, including the development of watershed specific materials. DEP wants to assure that local knowledge and experience is considered in order to develop effective techniques in relation to demographics and socio-economic status.*

f. Comment (trees)

The role of protecting and enhancing forests, urban tree canopy, wetlands, and forested stream buffers in controlling both stormwater volume and quality should be clearly addressed and factored into the overall Strategy and the individual Watershed Plans. [9], [12], [14].

Response

*Implicit in the Strategy and explicit in the implementation plans is the idea that natural areas are important in terms of reducing pollutant loads and runoff volumes. Many of the larger contiguous natural areas in the County are outside of the MS4 Permit area and not subject to the analyses conducted, however. Stream buffer reforestation is an explicit strategy in the implementation plans for both impervious cover treatment and load reduction.*

g. Comment (land use)

The *Rock Creek Implementation Plan* relies on old land use data. Table 2, page 8, indicates that data was from 2002. A lot of development has occurred in the Rock Creek watershed since then, including ongoing infill and redevelopment in developed areas and new development in the upper watershed, which will make it more difficult to achieve clean water and healthy streams. [11].

Response

*We used land use data from Maryland Department of Planning to be compatible with that used during development of regulatory pollutant load limits. Since 2002, there has been limited low density new development in the Upper Rock Creek SPA as well as limited infill and redevelopment in other parts of the watershed. The total amount, where land use changed dramatically from forest to suburban or urban, is small and did not have a significant impact on total loads.*

h. Comment (private property ESD)

In situations where the County is paying for BMPs, as opposed to citizens paying for their own residential retrofits, it strikes me that this Seattle green street model may be better than paying for rain gardens, rain barrels, etc. on the private property that may not be maintained, especially when the houses change hands. [13].

Response

*The Strategy pursues a range of approaches to meet water quality targets. Both green streets and private property implementation are part of the Strategy and the County believes including both approaches will yield the best results.*

i. Comment (specific projects)

Members of the public are deeply interested in specific projects and might become a lobbying force for the resources to implement the projects if they clearly understood which of them were being contemplated. [13].

Response

*A table of high and low priority projects is provided in the appendix of each implementation plan. For other general strategies (e.g., ESD on public property) specific locations have yet to be determined but will be identified as implementation moves forward.*

j. Comment (comments under litigation)

One set of comments related to ongoing litigation involving the County with respect to the Clean Water Act. [10].

Response

*Due to the ongoing litigation, the County is not able to respond to the specific nature of these comments other than to say that the County believes they are in compliance with their MS4 Permit requirements and the Strategy and associated Implementation Plans also fulfill requirements of the permit.*